

Astons Online home broadband & wifi guide



This guidance aims to help home broadband/wifi users identify and address problems

FIRST STEP is to work out when and where your home broadband/wifi is unsatisfactory. For example, do you have poor service all the time or is it in some parts of the premises and/or at certain times?

SECOND STEP is to measure your broadband speed. www.speedtest.net and www.broadbandspeedchecker.co.uk are recommended on-line tools; or use their apps on a tablet/smartphone

- a. Measuring broadband speed from your workstation is easiest but, if you are using wifi, the reading will be much lower than that advertised by your broadband provider because wifi degrades speeds by up to 30%;
- b. Connecting your PC or MAC directly by Ethernet cable to the router will provide you with what's known as 'line speed' which will be closer but probably a bit lower than that advertised by your broadband provider.

THIRD STEP is to contact your broadband provider to check your line and your line speed. Discuss with them whether they can improve your service.

If this does not lead to improvement, you can always call in a local specialist (Yellow pages, 'Out and About' monthly free magazine or contact theastonsonline@gmail.com for an introduction)

***Note:** You may not consider that your broadband provider is very helpful because they often tell you what speeds you should be having not what you are really having. Their remit does not extend into your house and therefore they are unlikely to be helpful about possible problems with your router. Further, routers supplied free by ISPs are often poor quality and not up to industry standard.*

FOURTH STEP is to check as best you can that you have no programmes/apps running out of control on any of your internet connected devices. One of these would seriously reduce bandwidth and speed of your connection as we've just discovered in the Astons.

We've put the following notes together to help you look in more detail at home broadband/wifi problems if you wish to. We've tried to make the notes readily understandable in spite of having to go into some technical details.

If you contact Astons Online (theastonsonline@gmail.com) we may be able to help further.

FREQUENTLY ASKED QUESTIONS

1. How do I know if my slow speeds or poor connectivity are caused by my broadband connection or by my workstation?

Try more than one PC, laptop, tablet or smart phone; broadband service is the problem if slow speeds and/or poor connectivity are evident with more than one device.

2. Does Microsoft provide any help?

Search for Network troubleshooter on a Microsoft/Windows device and try that.

3. How do I spot a problem with my router?

- *Check that the router is switched on; if you have a fibre broadband service, check that the 'Openreach' white box is also switched on;*
- *Re-boot (re-start) the router; ie switch off, wait about a minute and then switch on again; it may take up to three minutes to be fully operational again;*
- *While switched off, remove and reinsert all the cables to make sure they are fully engaged;*
- *Once the router is fully active again, all lights should be green or blue; if any are red or amber there is likely to be a problem;*
- *Consult the router manual to interpret any red and amber lights;*

Note: *always download an on-line manual soon after buying/installing a new device like routers, printers, scanners etc so it's available off-line when you need it urgently.*

4. If my router looks OK but wifi is not working, what next?

- *Put a wired connection (Ethernet cable) between workstation and router; then try to open a webpage;*
- *If the webpage works OK with the wired connection, then the wifi facility is faulty (see below);*
- *If the webpage is not working with the wired connection, the broadband line is almost certainly faulty so contact your Internet Service Provider (ISP) and ask them to test your line.*

5. What happens if my ISP diagnoses a faulty router as a result of the line test?

Ask them for a replacement.

6. Can I improve my router and/or wifi performance?

- *Possibly yes;*
- *See next FAQ for how to access your router;*
- *See following FAQ for the controls you might be able to adjust (each brand of router is different)*

7. How can I access my router? **Warning:** *This bit gets a bit geeky!*

- *Make sure you are connected to the router you want to manage/change;*
- *Preferably use an Ethernet cable connection but using wifi will also work;*

- Google for “[eg Talktalk] default router login”
- If unsuccessful, try one of the following IP addresses in your browser URL box:
 - 192.168.1.254 (for BT routers) 192.168.254.254
 - 192.168.0.1 192.168.1.1 192.168.2.1 10.10.1.1
- If these fail to show the router log-on screen, try browsing to www.routerlogin.net
- Next look for your router on the lower half of the page
<http://www.techspot.com/guides/287-default-router-ip-addresses/>
(If all these fail to provide what you need and you have a windows PC/laptop, contact theastononline@gmail.com, we may be able to help)
- On the router log-in page, there are boxes for your router administrator user name and password; if you don't know them (and they are not shown on the router), open another 'Tab' in your browser and go to www.routerpasswords.com ;
- Select your router brand and model from the drop-down menus and insert the user name and password provided to router login as router administrator.

Note: While you're logged in to your router, change the password away from the provider's standard (and widely known) password if you've not done so already.

8. How do I improve poor or uneven wifi signal around my house?

- Check wifi is enabled by the router; it probably is but just check the wifi setting;
- Wifi signal from routers is dissipated by walls and floors; router wifi range varies significantly from building to building;
- Old routers may not be up to new wifi standards and/or may need firmware upgrades - this can affect performance if not addressed;
- You can try and measure the wifi signal strength around your house using one the following apps available for tablets and smartphones:
 - Wifi Analyzer is the most comprehensive but only available on Android and Windows handheld devices (not iPads or iPhones);
 - Fing and Sweetspots will also show you the variation of signal around your house;
- Have you undertaken the line and router checks in the above FAQs?
- See if you can move the router in order to improve wifi signal in the rooms where you mostly use broadband; router position is limited by needing to be directly connected to the telephone entry point;
- Once you are logged into your router:
 - Some routers are pre-set on delivery to connect broadband 'On Demand'; the better setting is 'Always On' so check your router; (language/words will probably vary a bit between router brands);
 - If you can operate Wifi Analyzer, check the profile of your and nearby wifi to see if there are channel conflicts; change wifi channel on your router if you have a nearby wifi on the same channel as yours.
- You probably need an Extender or a Hotspot if you have checked all the above and still have a poor wifi signal where you mostly use broadband. Contact theastononline@gmail.com, we may be able to help.

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